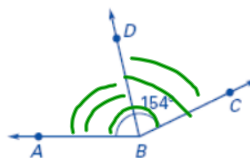


DAILY HOMEWORK QUIZ

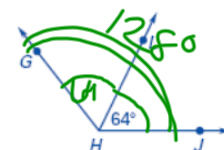
For use after Lesson 2.2, pages 60–66

1. In the figure at the right, \overrightarrow{BD} bisects $\angle ABC$. Find $m\angle ABD$ and $m\angle DBC$.

$$77^\circ \quad 77^\circ$$

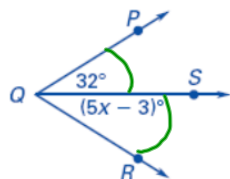


2. In the figure at the right, \overrightarrow{HL} bisects $\angle GHJ$. Find $m\angle GHL$ and $m\angle GHJ$. Then determine whether $\angle GHJ$ is acute, right, obtuse, or straight.



\overrightarrow{QS} bisects $\angle PQR$. Find the value of the variable.

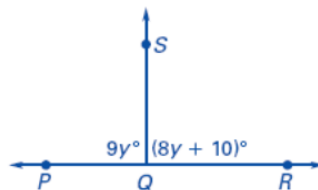
3.



$$5x - 3 = 32$$

$$x = 7$$

4.



$$\begin{aligned} 8y + 10 &= 9y \\ -8y &\quad -8y \\ 10 &= y \end{aligned}$$

Sep 18-2:54 PM

2-3 Complementary and Supplementary Angles

Complementary angles-2 angles whose sum is 90

°

Supplementary angles-2 angles whose sum is 180

°

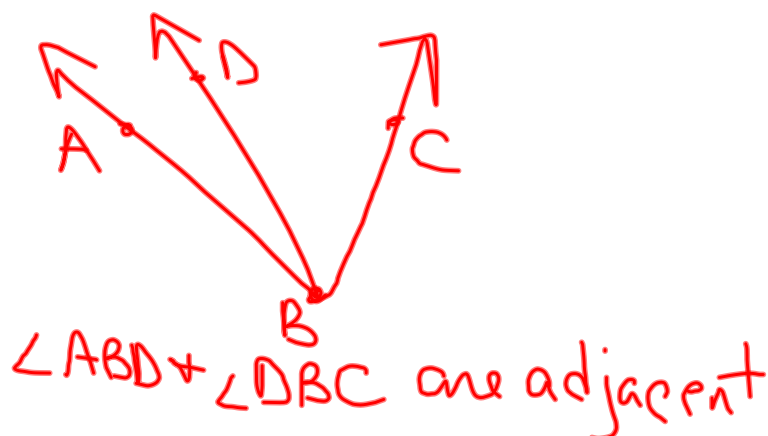
Oct 1-8:27 AM

	1.	2.	3.	4.	5.	6.
$m\angle ABC$	30°	45°	87°	x°	5°	40°
Complement of $\angle ABC$	60°	45°	3°	$90-x$	85°	50°
Supplement of $\angle ABC$	150°	135°	93°	$180-x$	175°	140°

$$\begin{array}{ll}
 1. & 90 - 30 = 60 \\
 & 180 - 30 = 150 \\
 2. & 90 - 45 = 45 \\
 & 180 - 45 = 135
 \end{array}$$

Oct 1-8:27 AM

Adjacent angles-angles that share a common vertex and side, but have no common interior points.



Oct 1-8:27 AM

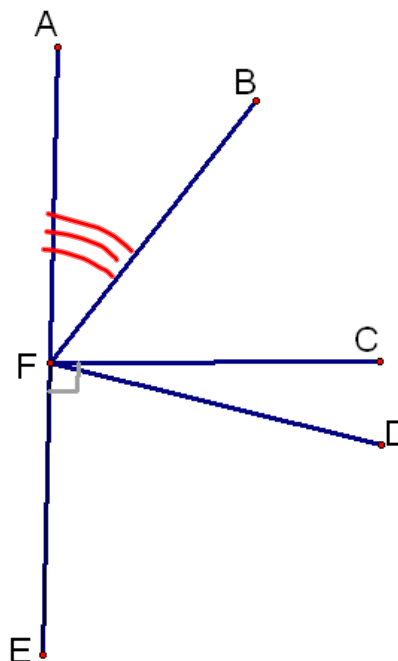
Use the picture to the right.
Name the following:

$\angle AFB + \angle BFC$ 2 adjacent \angle s

$\angle CFD \cong \angle EFD$ 2 complementary \angle s

$\angle AFB$ $\angle BFE$ 2 supplementary \angle s

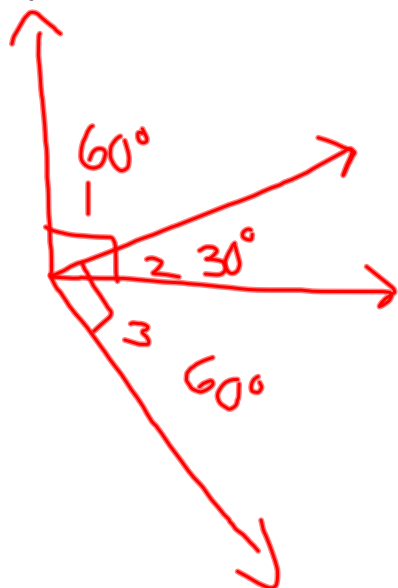
$\angle AFC + \angle EFC$ 2 \cong supplementary \angle s



Sep 29-9:01 AM

Theorem 2.1-Congruent Complements Theorem

Complements of the same angle are congruent



$\angle 1 + \angle 2$ are compl.
 $\angle 3 + \angle 2$ are compl.

$$\angle 1 \cong \angle 3$$

Oct 1-8:27 AM

Example:

$\angle 4$ and $\angle 5$ are complementary

$\angle 6$ and $\angle 5$ are complementary

$$m\angle 4 = 42^\circ \quad m\angle 6 = \underline{42^\circ}$$

Oct 1-8:28 AM

Example:

$\angle 7$ and $\angle 8$ are complementary

$\angle 9$ and $\angle 8$ are complementary

$$m\angle 7 = 55^\circ \quad m\angle 9 = \underline{55^\circ}$$

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Theorem 2.2-Congruent Supplements Theorem
Supplements of the same angle are congruent

Oct 1-8:28 AM

Example:

$\angle 9$ and $\angle 10$ are supplementary

$\angle 11$ and $\angle 10$ are supplementary

$$m\angle 9 = 105^\circ \quad m\angle 11 = \underline{105^\circ}$$

Oct 1-8:28 AM

Example:

$\angle ABC$ and $\angle DEF$ are supplementary

$\angle MNO$ and $\angle DEF$ are supplementary

$$m\angle ABC = 22^\circ \quad m\angle MNO = \underline{22^\circ}$$

Oct 1-8:28 AM

Use the picture to the right.

Example 1

$$m\angle ABD = 30$$

$$m\angle CBD = 2x + 10$$

$$2x + 10 + 30 = 90$$

$$2x + 40 = 90$$

$$2x = 50$$

$$x = 25$$

Example 2

$$m\angle ABD = 7x + 1$$

$$m\angle CBD = 5x + 6$$

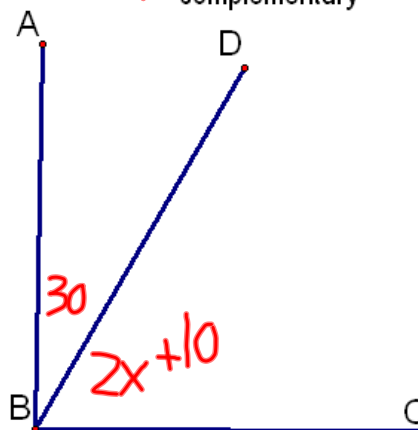
$$7x + 1 + 5x + 6 = 90$$

$$12x + 7 = 90$$

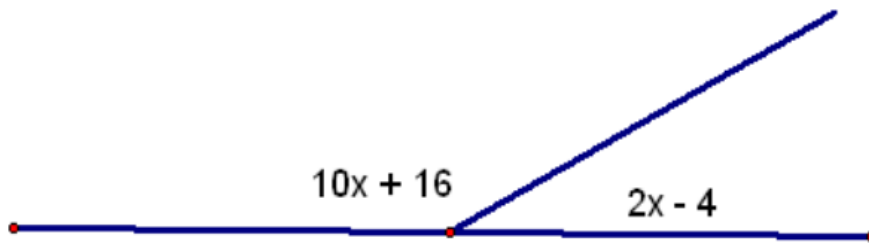
$$12x = 83$$

$$x = 6.9$$

* $\angle ABD$ and $\angle DBC$ are complementary



Sep 29-9:16 AM



$$10x + 16 + 2x - 4 = 180$$

$$12x + 12 = 180$$

$$12x = 168$$

$$x = 14$$

Sep 29-9:16 AM

HW p70-73

#s 8-10, 15-25, 29-32, 35-37, 40, 41

Oct 1-8:28 AM